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REMARKS

Claims 1-9 are pending and stand rejected.

Claims 1-8 have been amended. It is believed that no new matter has been added by these amendments.

<u>35 U.S.C. §112</u>

Claims 1-9 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, Claim 1 is being amended to correct the following:

- a) "PE" is being preceded by the term "polyethylene".
- b) (A1) is a metallocene polyethylene, while (C) is a polyethylene, that according to Claim 6 can be a metallocene polyethylene. The Examiner contends that the definition of (C) is so broad that it reads on (A1) and therefore does not meet the requirements of 35 U.S.C. 112, second paragraph. Applicant disagrees. While (C) may include (A1) and componet (A2) for that matter, the components (A1) and (A2) do not exist as sole components, but are cografted together, form a cografted structure that does not fall under the composition of component (C). There would be no confusion to one of skill in the art that component (C), which can be any polyethylene, is not the same as two separate polyethylenes (metallocene polyethylene and linear low density polyethylene) that have been cografted.
- c) The Examiner contends that it is unclear what the phrase "the total making 100% refers to. Applicant has amended claim 1 to clarify that the total of (A), (B), and (C) sum up to 100%.
- d) The Examiner points out that the term "comprised" referring to the MFI is improjer.

 Applicant has amended claim 1 to remove the citation to "comprised".
- c) Density cited in Claims 1, 2, and 5 should include units of g/cm³. these claims have been thus amended.

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- f) The Examiner has requested that Applicant amend claim 1 to cite a coextrusion t_ie composition. Applicant has amended claim 1, and the other claims that refer to claim 1 as requested.
- g) The term "characterized in that", coming from the translation of the original French in claims 2-6 and 8 has been amended to read "wherein", as suggested by the Exammer to conform to accepted US terminology.

35 U.S.C. \$103(a)

Claims 1 and 7 stand rejected under 35 U.S.C. 120(b) as anticipated by, of in the alternative under 35 U.S.C. §103(a) as being obvious over US Patent Number 6,060,549. The 549 reference fails to teach or suggest all of Applicants claim elements and claim limitations and therefore fails to present a prima facie case of obviousness. Specifically, Applicants Claim 1, as elected and amended, is to a composition having barrier properties comprising a blend of Polyamide (A) and polyolefin (B) wherein said blend contains nanofillers and wherein said polyamide forms the matrix, and wherein said polyolefin (B) is a highdensity polyethylene (HDPE). The '549 patent teaches a blend requiring a C4 to C7 isomonoolefin that pontains aromatic monomer units spread along the polymer chain. The polyethylene required by Applicant in the Election of species is a C2 olefin, and it contains no aromatic mononier units spread along the polymer chain. One of skill in the art would not be led to practice a \$\frac{1}{2}\$ oldfin from a teaching of a C4-7 monoolefin. Further, the '549 patent teaches away from Applicant's claim element of a C2 olefin (HDPE). The '549 requirement of a C4 to C7 isomonoolefin does not present a prima facie case of either anticipation or obviousness.

35 U.S.C. §103

Robert:

Claims 1-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Robert et al.. US Patent Number 6,528,587. The '587 reference fails to teach or suggest every one of Applicant's claim limitations, and therefore fails to present a prima facie case of obviousness. Specifically, the '587 reference fails to teach or suggest a coextrusion tie composition having 40

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to 60 weight percent of a styrene/butadiene/styrene block copolymer in which 50-90 mo. % of the block is styrene. A stated in the Background of the Invention in [0002] the '587 "document does not relate to multiplayer structures comprising a (polystyrene) PS layer. To date, cocxtrustion ties for structures comprising at least one PS layer are ethylene/vinyl acetate copolymers grafted with maleic anhydride."

The component (A) described in the 587 reference could be the same as the (A) edimponent claimed by Applicant. The difference is that the component (B) in the '587 reference broadly describes one or more components that should include a PE, and could include some SB\$ blocks. There is NO teaching or suggestion of any specific weight percentages for the SBS, nor any teaching or suggestion of a mol% of styrene that might be in the SBS. Applicant's have found that the selection of a specific weight range of a PE with a specific weight range of in SBS block having a specific mol% range of styrene, results in a tie layer composition that is useful for co-extruding multi-layer structures that include a polystyrene layer. While a general teaching that could generally include the elements of Applicant's claims appear in the '587, there is no teaching or suggestion of the specifically selected composition from within that broad feaching of Aupplicant's claimed selection composition.

Moreover, the '587 reference teaches away from Applicant's claims by exemplifying only coextrusion tie compositions that no SBS blocks at any mol% styrene, nor at any weight% of the SBS.

Finally, one of skill in the art would not stumble onto Applicant's claimed composition by routine experimentation, since only result-effective variable can be optimized, and there was no suggestion of a co-extrusion tie that include any SBS for use in forming a multi-layer structure that would include a polystyrene (PS) layer.

Beuzelin in view of Robert

Claims 1-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Beuzellin et al (US Patent Number 6,657.006) in view of Robert et al, US Patent Number 6,528,587. The '006 reference, also to Applicant Company, fails to teach or suggest every one of Applicantis claim limitations, and therefore fails to present a prima facie case of obviousness. Specifically, the

1006 reference fails to teach or suggest Applicant's claimed weight % of SBS, mole % of styrence in the SBS, or a blend of a metallocenc PE and LLDPE.

The '006 reference fails to teach or suggest Applicant's weight % of SBS. Rather no % for SBS is mentioned, and the one Example having SBS (Example IV) shows and SBS block with an EVA copolymer grafted with MA - a composition totally outside of Applicant's claims. Thus even when SBS is exemplified, the Example teaches away from Applicant's claims.

The '006 reference, in describing the percentage of styrene in a block copolymer of SBS, says "the styrene content of these copolymers is lower than 50% by weight" (Column 4, line § 37, 38). Applicant's claim a styrene content in the SBS of 50 - 90 mol %. The teaching of the '006 reference (low styrene) is exactly opposite the high styrene claimed by Applicant.

The '006 reference fails to any use of a metallocene polyethylene, much less the use of a metallocene polyethylene cografted with an LLDPE.

Based on the lack of any teaching or suggestion of all of Applicant's claim limitations in the '006 reference, plus the teaching away and opposite teachings, the '006 reference does not present a prima facie case of obviousness.

Further, the '587 reference does not heal the many flaws of the '006 reference in presenting a case of obviousness.

Since the cited references fail to present a prima facie case of obviousness over the claims as amended, Applicant believes that the reasons for rejection have been overcome, and the claims herein should be allowable to the Applicant. Accordingly, reconsideration and allowance are requested.

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Respectfully submitted.

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